

## ABSTRACT

### VALORIZATION OF BY-PRODUCTS IN THE ECOLOGICAL COAL TRANSFORMATION

A coal transformation system comprises an ecological coal production unit for transforming raw coal into ecological coal. The production unit has an exhaust for carrying in a storage unit combustible, gaseous, waste by-products generated during the transformation of raw coal. A control system is provided for allowing the combustible, gaseous, waste by-products to be withdrawn and subsequently used as an additional source of energy when the system energy demand reaches a predetermined value, thereby contributing to reduce the energy costs during peak power needs.